REPLACEMENT CLAIMS

Please replace claim 1 with the following:

1. A semiconductor manufacturing apparatus for processing a substrate surface, said apparatus comprising:

a vacuum vessel having a vacuum vessel plate;

a substrate stage provided on said vacuum vessel plate, said substrate stage having a substantially constant vertical position;

a cylinder installed surrounding said substrate stage, a gap existing between said cylinder and said vacuum vessel plate, said gap being made variable by lifting/lowering said cylinder, said cylinder having a cylinder interior space and a cylinder exterior space associated therewith, said cylinder interior space defining a processing chamber for processing said substrate surface, said cylinder exterior space including a transport chamber for transferring said substrate;

at least one cylinder lifting/lowering mechanism being operatively associated with said cylinder;

a substrate conveyer mechanism provided with said transport chamber, said substrate conveyer mechanism for transferring said substrate between said processing chamber and said transport chamber through said gap;

said processing chamber being provided with a processing chamber gas inlet and a processing chamber gas outlet; and

said transport chamber being provided with a transport chamber gas inlet and a transport chamber gas outlet.

Please replace claim 2 with the following:

2. A semiconductor manufacturing apparatus for processing a substrate surface, the apparatus composed of a vacuum vessel with a top and bottom plate, said apparatus comprising:

a plurality of substrate stages provided on said vacuum vessel bottom plate, each of said substrate stages having a substantially constant vertical position;

a plurality of cylinders provided respectively with an O ring connected to said bottom plate through bellows so as to surround said substrate stage, said cylinders forming a gap with said vacuum vessel top plate, a gap between said cylinder and said vacuum vessel top plate being made variable by lifting/lowering said cylinder, and at a position where said gap becomes minimum, a plurality of cylinder lifting/lowering mechanisms operatively associated with said cylinder being provided, in order to hermetically separate an interior space inside said cylinder from an exterior space outside thereof, said interior space forming a processing chamber for processing said substrate surface, the exterior space defining a transport chamber for transferring said substrate;

said transport chamber being provided with a substrate conveyer mechanism for transferring said substrate between said processing chamber and said transport chamber through said gap;

said processing chamber being provided with a processing chamber gas inlet and a processing chamber gas outlet; and

said transport chamber being provided with a transport chamber gas inlet and a transport chamber gas outlet.

Please replace claim 11 with the following:

11. The semiconductor manufacturing apparatus according to Claim 10, wherein said plasma generation mechanism radiates microwave energy through a slot antenna.